

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.

82



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/855,683	05/16/2001	Tuan Huu Pham	06975-136001	1532
26171	7590	08/24/2004	EXAMINER	
FISH & RICHARDSON P.C. 1425 K STREET, N.W. 11TH FLOOR WASHINGTON, DC 20005-3500			HO, THE T	
			ART UNIT	PAPER NUMBER
			2126	

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

82

Office Action Summary

Application No.

09/855,683

Applicant(s)

PHAM ET AL.

Examiner

The Thanh Ho

Art Unit

2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1,8-14,17-18,23-27,30-32,39-42,45-46,51-55,58-60,67-70,73-74,79-83,86-139 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,8-14,17-18,23-27,30-32,39-42,45-46,51-55,58-60,67-70,73-74,79-83,86-139 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the amendment filed 5/20/2004.
2. Claims 1, 8-14, 17-18, 23-27, 30-32, 39-42, 45-46, 51-55, 58-60, 67-70, 73-74, 79-83 and 86-139 have been examined and are pending in the application.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 126 and 128 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The applicant recites "The computer program of claim 120" on line 1 of claim 126, which is an inappropriate dependent because it depends from the computer program of claim 125. For the purpose of art rejection, it is interpreted as "The computer program of claim 125" as best understood and as it appears to be. Correction is required.

The applicant recites "The computer program of claim 120" on line 1 of claim 128, which is an inappropriate dependent because it depends from the computer program of claim 127. For the purpose of art rejection, it is interpreted as "The computer program of claim 127" as best understood and as it appears to be. Correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 8-14, 23-27, 30-32, 39-42, 51-55, 58-60, 67-70, 79-83, 86-94, 97-11, 114-126 and 129-139 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan U.S Patent No. 6,075,863 in view of Onosaka U.S Patent No. 5,961,608.

As to claim 1, Krishnan teaches a system for installing computer software components (applets, line 24 column 3) on a client device (device capable of performing user input and output functions, lines 40-43 column 2) for enabling connectivity (to connect a user computer to a remote computer, lines 34-35 column 1) to a host system (remote computer, line 35 column 1) by at least one hardware device (modem 24, Fig. 1), comprising

a receiving module (data port 16, line 44 column 2) that is structured and arranged to receive (exchange data between modem 10 and host computer 12, lines 44-45 column 2) a connectivity component (applets, line 24 column 3) that enables connectivity (to connect a user computer to a remote computer, lines 34-35 column 1) to a host system (remote computer, line 35 column 1) by at least one hardware device (modem 24, Fig. 1);

Art Unit: 2126

a detection module that is structured and arranged to detect whether installation (determines if the applet on the remote modem has the newer version, lines 29-36 column 4) of the connectivity component (applets, line 24 column 3) is needed to enable connectivity (to connect a user computer to a remote computer, lines 34-35 column 1) between the client device (device capable of performing user input and output functions, lines 40-43 column 2) and the host system (remote computer, line 35 column 1) using a selected hardware device (modem 24, Fig. 1);

an installation module that is structured and arranged to install (download the newer applet from the remote modem, lines 35-36 column 4) the connectivity component (applets, line 24 column 3) when the connectivity component is needed (if the remote modem has the newer version, lines 33-34 column 4) to enable connectivity (to connect a user computer to a remote computer, lines 34-35 column 1) between the client device (device capable of performing user input and output functions, lines 40-43 column 2) and the host system (remote computer, line 35 column 1) using the selected hardware device (modem 24, Fig. 1);

the detection module determines whether a connectivity component is stored locally (...if the versions are the same, then the negotiation is completed and processing continues at step 52. However, if the remote modem has a newer version of the applet, then at step 48 modem 10 downloads the newer applet from the remote modem..., lines 32-36 column 4; ... any time a connection is established between modem 10 and a similar remote modem, the use of a data encryption applet may be negotiated. If the modems already contain the same version of the encryption applet then data transfers

Art Unit: 2126

may begin. If, however, one of the modems lacks the encryption applet, or has an older, out-of-date version, the modems may negotiate to transfer the new version..., line 64 column 4 to line 3 column 5) that is needed to enable connectivity;

the receiving module receives (download the newer applet from the remote modem, lines 35-36 column 4) an updated connectivity component (applets, line 24 column 3) from a remote server (host computer 12, line 45 column 2) when the detection module does not detect the connectivity component that is needed (the applet on the remote modem has the newer version, lines 29-36 column 4) to enable the connectivity;

the installation module installs the updated connectivity component received from the remote server (download the newer applet from the remote modem, lines 35-36 column 4).

Krishnan does not explicitly teach several different hardware devices and detecting a new hardware device.

Onosaka teaches a system for loading computer software components (modem driver for a selected modem, lines 29-33 column 4) on a client device (user device, lines 34-37 column 4) for enabling connectivity to a host system (access remote communication server, lines 49-55 column 4) by at least one (the current modem, lines 32-33 column 4) of several different hardware devices (removable card, internal modem, external modem, lines 31-32 column 4); detecting a new hardware device (detect the device being connected, lines 30-31 column 2). It would have been obvious to apply the teachings of Onosaka to the system of Krishnan because this gives the

client computer the convenience of using a suitable modem from multiple modems to connect to a remote computer as disclosed by Onosaka (lines 29-37 column 4).

As to claim 8, Krishnan as modified further teaches the connectivity component (applets, line 24 column 3) is capable of interfacing a device driver (the applets upgrade the modem control software, lines 34-41 column 5) to enable communications (to connect a user computer to a remote computer, lines 34-35 column 1) between computer software (data, line 44 column 2) at the client device (device capable of performing user input and output functions, lines 40-43 column 2) and the host system (host computer 12, line 45 column 2) using the new hardware device (modem 24, Fig. 1) associated with the device driver (the modem control software, line 35 column 5).

As to claim 9, Krishnan as modified further teaches the connectivity component (applets, line 24 column 3) is capable of interfacing directly (directly executed by the processor of the communication device, lines 7-8 of abstract) with the selected hardware device (modem 24, Fig. 1) to enable connectivity (to connect a user computer to a remote computer, lines 34-35 column 1) between the client device (device capable of performing user input and output functions, lines 40-43 column 2) and the host system (host computer 12, line 45 column 2) using the hardware device (modem 24, Fig. 1).

As to claim 10, Krishnan as modified further teaches the connectivity component (applets, line 24 column 3) includes computer software that interfaces with a driver (the applets upgrade the modem control software, lines 34-41 column 5) for the new hardware device (modem 24, Fig. 1) that is used to connect (to connect a user

Art Unit: 2126

computer to a remote computer, lines 34-35 column 1) to the host system (host computer 12, line 45 column 2).

As to claim 11, Krishnan as modified does not explicitly teach the use of broadband connectivity component with a broadband communication device. Onosaka teaches the use of external modem and its driver (lines 29-37 column 4). It would have been obvious to apply the teachings of Onosaka to the system of Krishnan because this external modem and its driver could be a broadband communication device with a broadband connectivity component since such teaching is conventional and well known in the art.

As to claim 12, Krishnan as modified does not explicitly teach the use of DSL connectivity component with a DSL modem. Onosaka teaches the use of external modem and its driver (lines 29-37 column 4). It would have been obvious to apply the teachings of Onosaka to the system of Krishnan because this external modem and its driver could be a DSL modem with a DSL connectivity component since such teaching is conventional and well known in the art.

As to claim 13, Krishnan as modified further teaches the connectivity component (applets, line 24 column 3) includes a cable connectivity component (the applets upgrade the modem control software, lines 34-41 column 5) to enable connectivity (to connect a user computer to a remote computer, lines 34-35 column 1) to the host system (host computer 12, line 45 column 2) using a cable modem (cable modem, line 42 column 6).

Art Unit: 2126

As to claim 14, Krishnan as modified does not explicitly teach the use of satellite connectivity component with a satellite modem. Onosaka teaches the use of external modem and its driver (lines 29-37 column 4). It would have been obvious to apply the teachings of Onosaka to the system of Krishnan because this external modem and its driver could be a satellite modem with a satellite connectivity component since such teaching is conventional and well known in the art.

As to claim 23, Onosaka further teaches the modules perform automatically without user intervention (automatically detects, line 31 column 2).

As to claim 24, Krishnan as modified further teaches the connectivity component received (applets downloaded into modem 10 and stored in RAM 20, lines 24-35 column 3) includes an updated version of a connectivity component stored (the newer version of the applet is cached and retained, lines 3-5 column 5) on the client device (device capable of performing user input and output functions, lines 40-43 column 2) before the connectivity component (applets, line 24 column 3) is installed by the installation module (download the newer applet from the remote modem, lines 35-36 column 4).

As to claim 25, Krishnan as modified further teaches comparing a version of the updated connectivity component (applets, line 24 column 3) received with a version of the connectivity component (determines if the applet on the remote modem has the newer version, lines 29-36 column 4) stored on the client device (device capable of performing user input and output functions, lines 40-43 column 2).

As to claim 26, Krishnan as modified further teaches the receiving module is structured and arranged to receive version information (if the remote modem has a newer version, lines 33-34 column 4) from a remote server associated with a connectivity component; comparing a version of the updated connectivity component (applets, line 24 column 3) received with a version of the connectivity component (determines if the applet on the remote modem has the newer version, lines 29-36 column 4) stored on the client device (device capable of performing user input and output functions, lines 40-43 column 2); install the connectivity component (download the newer applet from the remote modem, lines 35-36 column 4).

As to claim 27, Krishnan as modified further teaches the receiving module is structured and arranged to receive (download the newer applet from the remote modem, lines 35-36 column 4) an updated connectivity component (applets, line 24 column 3) from the remote server (host computer 12, line 45 column 2) when the detection module determines that the version information associated with the connectivity component stored on the client device (device capable of performing user input and output functions, lines 40-43 column 2) is not correct when compared against the version information received from the remote server (determines if the applet on the remote modem has the newer version, lines 29-36 column 4).

As to claim 30, Krishnan as modified further teaches a host system receiving module receive a request (a message to the remote modem, line 3 column 4) to send a connectivity component (applets, line 24 column 3) to a local client device; a host system installation module send the connectivity component to the local client device

Art Unit: 2126

(download the newer applet from the remote modem, lines 35-36 column 4) for installation on the local client device in response to the request.

As to claim 31, Krishnan as modified further teaches a host system detection module that is structured and arranged to determine a version (the applet on the remote modem has the newer version, lines 29-36 column 4) of the connectivity component needed for installation (download the newer applet from the remote modem, lines 35-36 column 4) on the local client device.

As to claims 32, 39-42, 51-55 and 58-59, they are method claims of claims 1, 8-11, 23-27 and 30-31, respectively. Therefore, they are rejected for the same reasons as claims 1, 8-11, 23-27 and 30-31 above.

As to claims 60, 67-70, 79-83 and 86-87, they are computer program product claims of claims 1, 8-11, 23-27 and 30-31, respectively. Therefore, they are rejected for the same reasons as claims 1, 8-11, 23-27 and 30-31 above.

As to claim 88, it is a system claim of claim 1. Therefore, it is rejected for the same reasons as claim 1 above. Krishnan as modified further teaches the receiving module (data port 16, line 44 column 2) copies at least one of the connectivity components (applets, line 24 column 3) to the client device (device capable of performing user input and output functions, lines 40-43 column 2) from a disk (ROM 22, lines 56-57 column 2) and store the connectivity component in a dormant state (applets downloaded into modem 10 and stored in RAM 20, lines 24-35 column 3) on the client device (device capable of performing user input and output functions, lines 40-43 column 2).

Art Unit: 2126

As to claims 89-92, they are system claims of claims 8-11, respectively.

Therefore, they are rejected for the same reasons as claims 8-11 above.

As to claim 93, Krishnan as modified further teaches the detection module is structured and arranged to detect whether the installation (determines if the applet on the remote modem has the newer version, lines 29-36 column 4) of the connectivity component (applets, line 24 column 3) is needed to enable connectivity (to connect a user computer to a remote computer, lines 34-35 column 1) between the client device (device capable of performing user input and output functions, lines 40-43 column 2) and the host system (host computer 12, line 45 column 2) in response to an input received from a user (send a message to the remote modem inquiring if the remote modem is Java enabled, lines 3-4 column 4) of the client device (device capable of performing user input and output functions, lines 40-43 column 2) requesting communications (to connect a user computer to a remote computer, lines 34-35 column 1) using the selected hardware device (modem 24, Fig. 1); and the installation module is structured and arranged to install (download the newer applet from the remote modem, lines 35-36 column 4) the connectivity component (applets, line 24 column 3) when the connectivity component (applets, line 24 column 3) is needed (if the remote modem has the newer version, lines 33-34 column 4) based on the input (send a message to the remote modem inquiring if the remote modem is Java enabled, lines 3-4 column 4) from the user of the client device (device capable of performing user input and output functions, lines 40-43 column 2).

Art Unit: 2126

As to claim 94, Krishnan as modified does not explicitly teach a request to change connectivity to the host system from a low-bandwidth connection type to a broadband connection type. Onosaka teaches request to change connectivity (user selects the communication devices, lines 27-28 column 2). Onosaka does not explicitly teach changing from a low-bandwidth to a broadband connection type. However, Onosaka teaches the system is using several types of modems and drivers (lines 29-37 column 4). Therefore one of ordinary skill in the art would conclude that these modems could include a low-bandwidth type and a broadband type since such teachings are conventional and well known in the art.

As to claim 97, Onosaka further teaches hardware device detector (detect the device being connected, lines 30-31 column 2).

As to claims 98-104, they are system claims of claims 23-27 and 30-31, respectively. Therefore, they are rejected for the same reasons as claims 23-27 and 30-31 above.

As to claims 105-111 and 114-119, they are method claims of claims 88-94, 97-98 and 101-104, respectively. Therefore, they are rejected for the same reasons as claims 88-94, 97-98 and 101-104 above.

As to claims 120-126 and 129-136, they are computer program product claims of claims 88-94 and 97-104, respectively. Therefore, they are rejected for the same reasons as claims 88-94 and 97-104 above.

As to claim 137, Krishnan as modified further teaches the detection module detects a prior receipt of the connectivity component (lines 25-35 column 3).

As to claim 138, it is a method claim of claim 137. Therefore, it is rejected for the same reasons as claim 137 above.

As to claim 139, it is a computer program product claim of claim 137. Therefore, it is rejected for the same reasons as claim 137 above.

5. Claims 17-18, 45-46, 73-74, 95-96, 112-113 and 127-128 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan in view of Onosaka, and further in view of Coutts U.S Patent No. 6,311,165.

As to claim 17, Krishnan as modified does not explicitly teach the installation module installs a list of programs needed to install the connectivity component. Coutts teaches a list of programs needed to install the driver (software modules, line 25 column 21). It would have been obvious to apply the teachings of Coutts to the system of Krishnan as modified because this reduces the client's memory space and increasing processing time as disclosed by Coutts (lines 10-54 column 3).

As to claim 18, Coutts further teaches sequential list of programs such that only one reboot of the client device is necessary to accomplish installation (simple boot code...downloading the current version of the application software, lines 41-52 column 9).

As to claims 45-46, they are method claims of claims 17-18, respectively. Therefore, they are rejected for the same reasons as claims 17-18 above.

As to claims 73-74, they are computer program product claims of claims 17-18, respectively. Therefore, they are rejected for the same reasons as claims 17-18 above.

As to claims 95-96, they are system claims of claims 17-18, respectively.

Therefore, they are rejected for the same reasons as claims 17-18 above.

As to claims 112-113, they are method claims of claims 17-18, respectively.

Therefore, they are rejected for the same reasons as claims 17-18 above.

As to claims 127-128, they are computer program product claims of claims 17-18, respectively. Therefore, they are rejected for the same reasons as claims 17-18 above.

Response to Arguments

6. Applicant's arguments filed have been fully considered but they are not persuasive.

Applicant argued that the cited references do not teach downloading the connectivity component from the remote computer after detecting the component is not in the client (Remarks, first completed paragraph page 28). In response, the applicant argued a new limitation added to the claims. However, the new limitation is still met by the cited reference as disclosed in the claim rejections above. Krishnan as modified above teach once the system detects that the newer version of the connectivity component is not in the local system, the newer version will be downloaded from the remote system to the local system (line 64 column 4 to line 3 column 5). The reference meets the limitation as claimed.

Applicant argued that the cited references do not teach copying the connectivity components from a disk and store them in a dormant state on the client device

Art Unit: 2126

(Remarks, first completed paragraph page 29). In response, the applicant argued a limitation of the newly added claims. However, the new limitation is still met by the cited reference as disclosed in the claim rejections above. Krishnan teaches the receiving module copies the connectivity components (applets, line 24 column 3) to the client device from a disk (ROM 22, lines 56-57 column 2) and stores the connectivity components in a dormant state (applets downloaded into modem 10 and stored in RAM 20, lines 24-35 column 3) on the client device. The reference meets the limitation as claimed.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to The Thanh Ho whose telephone number is (571) 272-

Art Unit: 2126

3762. A voice mail service is also available for this number. The examiner can normally be reached on Monday – Friday, 8:30 am – 5:00 pm.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Any response to this action should be mailed to:

Commissioner for Patents

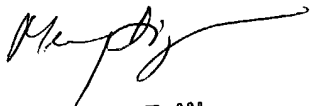
P.O Box 1450

Alexandria, VA 22313-1450

Or fax to:

- AFTER-FINAL faxes must be signed and sent to (703) 872 - 9306.
- OFFICAL faxes must be signed and sent to (703) 872 - 9306.
- NON OFFICAL faxes should not be signed, please send to (571) 273 – 3762

TTH
August 18, 2004


MENG-AL T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100